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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/625,885	07/23/2003	Andrew Wells Phelps	UVD 0279 IA/UD 267	3049	
75	7590 03/13/2006			EXAMINER	
Killworth, Gottman, Hagan & Schaeff, L.L.P.			HAILEY, PATRICIA L		
One Dayton Ce	ntre		1 2m 12 1m		
Suite 500			ART UNIT	PAPER NUMBER	
Dayton, OH 45402-2023			1755		

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/625,885	PHELPS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Patricia L. Hailey	1755				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>Dece</u>	ember 21 2005					
	s action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under I	•					
Disposition of Claims						
4)⊠ Claim(s) <u>1,3-77 and 79-104</u> is/are pending in t	he application					
4a) Of the above claim(s) is/are withdra						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,3-77 and 79-104</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correc	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).				
<ol> <li>Certified copies of the priority document</li> </ol>	s have been received.					
2. Certified copies of the priority document	s have been received in Applicati	on No				
<ol><li>Copies of the certified copies of the prior</li></ol>	*	ed in this National Stage				
application from the International Burea	, ,,,					
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
<ul> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>	5) Notice of Informal F 6) Other:	Patent Application (PTO-152)				

Applicants' remarks and amendments, filed on December 21, 2005, have been carefully considered. Claims 2 and 78 have been canceled; no new claims have been added.

### Withdrawn Rejections

The provisional obviousness-type double patenting rejections of (1) claims 1-5, 8-41, 43, 46-52, 55-58, and 61-61 as being unpatentable over claims 1-5, 9-43, 50-61, and 68-73 of copending Application Serial No. 10/625, 915, and (2) claims 1-5, 8-41, 43, 46-52, 55-58, and 61-61 as being unpatentable over claims 1-5, 7-41, 56-67, 74-79, 91, 108, 117, 121-125, and 137-139 of copending Application Serial No. 10/625,886, stated in the previous Office Action, have been withdrawn in view of the Terminal Disclaimers filed by Applicants on December 21, 2005.

The 103(a) rejection of claims 1-104 as being unpatentable over Askew et al. (U. S. Patent No. 5,226,956), stated in the previous Office Action, has been withdrawn in view of Applicants' persuasive arguments traversing this rejection.

## New Grounds of Rejection

The following New Grounds of Rejection are being made in view of Applicants' amendments to the instant claims, and in view of the newly discovered references to Tadokoro et al. (WO 98/48075, with U. S. Patent No. 6,200,672 as its English language

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equivalent), and DePue et al. (U. S. Patent No. 5,322,560), and in view of Applicants' amendments to the claims.

#### Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 3, 79, and 85-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are indefinite because they depend from canceled claims 2 and 78. To expedite prosecution, claim 3 will be examined as depending from claim 1, and claims 79 and 85-90 will be examined as depending from claim 77.

#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 3-77, and 79-104 are rejected under 35 U.S.C. 102(b) as being anticipated by Tadakoro et al. (WO 98/48075, with U. S. Patent No. 6,200,672 as its English language equivalent; citations in the patent are employed herewith).

Tadakoro et al. disclose a rare earth metal elements as a complex and/or salt with an organic compound for mixed dispersion in a layer on a metal sheet, to effectively inhibit corrosion of the metal sheet. See col. 2, lines 38-46 and lines 52-61 of Tadakoro et al.

The complex comprises a rare earth metal element and an organic compound having in the molecule one or more functional groups such as –COOH, -O-, = O, --OH, --NH<sub>2</sub>, sulfidic and phosphoric groups, etc., and a matrix capable of physically holding said complex and/or salt and having adhesive power for metal sheets. Additionally, the complex exhibits a solubility in water at pH 3 and below of at least 0.1 mol/l, based on the rare earth element. See col. 3, lines 12 to col. 4, line 41 of Tadakoro et al., which also teaches examples of the matrix (e.g., a resin, orthophosphoric acid, oxyacid compounds, etc.).

Examples of the organic compound forming the complex are found at col. 5, lines 10-31 of Tadakoro et al.; the solubility of the complex in water at pH 6-7 is no greater than 0.01 mol/l, based on the rare earth metal element (lanthanum or cerium, see col. 5, lines 5-9). See col. 5, lines 10-54 of Tadakoro et al.

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See also 6, line 59 to col. 8, line 3 of Tadakoro et al. for additional functional groups for forming the complex, as well as additional examples of the matrix.

At col. 9, line 26 to col. 10, line 9 of Tadakoro et al., the reference discusses employing oxyacid compounds of the rare earth metal elements (which encompasses compounds formed between anions such as phosphate, tungstate, vanadate, etc., with rare earth metals) to form inorganic-based corrosion resistance chemical treatment layers. To these layers, additives such as alkali metal phosphates, phosphates of aluminum and zirconium, etc., may be added. See col. 10, lines 10-19 of Tadakoro et al.

In view of these teachings, Tadakoro et al. anticipate claims 1, 3-77, and 79-104.

5. Claims 1, 3-77, and 79-104 are rejected under 35 U.S.C. 102(b) as being anticipated by DePue et al. (U. S. Patent No. 5,322,560).

DePue et al. disclose a corrosion inhibitor that is the reaction product of a water-soluble metal salt (including metals selected from yttrium and rare earth metals) and an anionic metal salt including transition metal oxo-complexes and soluble salts of silicon and mixtures thereof. See the Abstract of DePue et al., as well as col. 2, lines 27-36, in which DePue et al. disclose titanium, vanadium, chromium, zirconium, niobium, molybdenum, hafnium, tantalum, tungsten, and mixtures thereof as exemplary transition metals (see also col. 3, lines 1-22 of DePue et al., which also discloses that the inhibitor is "slightly water-soluble", defined as no more than  $10^{-3}$  molar concentration in a saturated aqueous solution).

The corrosion inhibitors are useful when used in combination with water-soluble salts of yttrium, trivalent, cerium, and tetravalent cerium. See col. 2, lines 56-60 of DePue et al.

The inhibitors are useful in treating aluminum flake pigment particles (col. 2, lines 64-68), by forming a slurry of deionized water, corrosion inhibitor, and pigment, optionally with a solvent. See col. 3, lines 35-43 of DePue et al.

The inhibitors are effective in coating compositions, when used as a secondary corrosion inhibitor. See col. 4, lines 32-61 of DePue et al., as well as col. 5, line 10 to col. 6, line 60, which also discloses exemplary coating compositions and their additives (resins, rheology control agents, etc.), as well as exemplary substrates to which the coating compositions can be applied (col. 6, lines 39-49).

In view of these teachings, DePue et al. anticipate claims 1, 3-77, and 79-104.

#### Information Disclosure Statement

The Information Disclosure Statement filed by Applicants on February 27, 2006, is noted, but, as of this Office Action, was not yet viewable by the Examiner. Pending the availability of the IDS, the references cited therein will be reviewed, and a signed and initialed copy of the PTO Form 1449 will be included with the next Office Action.

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Hailey/plh

Examiner, Art Unit 1755

March 6, 2006

JA-BORENGO SUPERVISORY PATENT EXAMINER